

**INTERNATIONAL RESEARCH
AND PRACTICE CONFERENCE
“NANOTECHNOLOGY
AND NANOMATERIALS”**

**26-28 of August 2026
Chernivtsi, UKRAINE**

Abstract book

The International research and practice conference “Nanotechnology and nanomaterials” (NANO-2026). Abstract Book of participants of the International research and practice conference, 26–28 August 2026, Chernivtsi. Edited by Dr. Olena Fesenko. – Kyiv: 2026. – P. 662.

This book contains the abstracts of contributions presented at the International research and practice conference “Nanotechnology and Nanomaterials” (NANO-2026), held on 26–28 August 2026 at Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.

The NANO-2026 Conference was organized by the Institute of Physics of NAS of Ukraine with the participation of the University of Tartu (Estonia), Yuriy Fedkovych Chernivtsi National University, University of Turin (Italy) and Pierre and Marie Curie University – Paris 6 (France).

NANO-2026 is the 14th conference in the series of NANO-conferences initiated by the Institute of Physics of NAS of Ukraine in 2012 in the framework of FP7 Nanotwinning project. From year to year, they attract more attention and participants. In 2012, the first meeting was held in the format of International Summer School for young scientists «Nanotechnology: from fundamental research to innovations». The 2013 and 2014 conferences were organized in conjunction with the International Summer Schools for young scientists under the same title. In 2013, this event was attended by more than 300 scientists, in 2014-2017, 450 scientists took part and in 2018 it gathered above 650 participants. In 2021 conference was attended by more than 700 scientists from Ukraine, Poland, Italy, Estonia, France, Austria, Germany, Greece, Turkey, USA, Romania, Moldova, Czech Republic, Taiwan, Lithuania, Egypt, India, Algeria, Indonesia and other countries. In 2021 - 2025 the Organizer Committee has received more than 800 application forms from about 25 countries of the world each years.

The NANO-2026 conference brought together leading scientists and young researchers from many countries of the world. This year its topics were as follows: Nanobiotechnology for health-care; Nanochemistry and biotechnology; Nanocomposites and nanomaterials; Nanooptics and photonics; Nanoplasmonics and surface enhanced spectroscopy; Nanoscale physics; Nanostructured surfaces; Physico-chemical nanomaterials science.

Website of the NANO-2026 conference: <http://nano-conference.iop.kiev.ua>

Welcome to International Conference «NANOTECHNOLOGY AND NANOMATERIALS»!

It is my great pleasure to welcome all participants of the International Conference “Nanotechnology and Nanomaterials” (NANO-2026), which will take place in Chernivtsi, at the Yuriy Fedkovych Chernivtsi National University, from August 26 to 28, 2026. This event is designed to foster scientific dialogue and collaboration among researchers from diverse fields working at the forefront of nanoscience and nanotechnology.

Since its inception in 2012, the NANO Conference series has become a prominent platform in Ukraine and beyond for sharing cutting-edge research and applications in nanotechnology. Each year, it brings together experienced and early-career scientists alike, offering unique opportunities to learn from internationally renowned experts and to engage in discussions on emerging scientific topics in the field.

Our previous International Conferences and Summer Schools received positive feedback from international experts and from the media. Now we are holding the 14th such Conference, for which we are deeply grateful to its indefatigable initiator and organizer, Dr. Olena Fesenko and all members of her team, as well as to the universities and institutes that are co-organizing this event.

This year, the conference will be held in a hybrid format, welcoming participants both in person and online. We are pleased to have received over 600 registrations from researchers representing more than 30 countries. The thematic program covers a broad spectrum of topics including physico-chemical nanomaterials science, nanobiotechnology for health care, nanoscale physics, nanoplasmonics and nanooptics and photonics, nanostructured surfaces, nanocomposites, and microscopy of nano-objects.

In today’s world, international scientific cooperation holds special significance. Beyond advancing research, it helps build bridges across borders and contributes to overcoming global challenges, fostering peace and understanding. This is of particular importance now for Ukraine and for many other nations.

I wish all participants a productive and inspiring conference—one that expands knowledge, strengthens collaboration between academia and research institutions, and lays the groundwork for impactful innovations in nanoscience and nanotechnology.

May peace accompany us all, and may our scientific research continue!



**President of the National Academy
of Sciences of Ukraine**

Anatoly Zagorodny

Session 5
Nanostructured
surfaces

The influence of vibration-centrifugal hardening parameters on the formation of the surface nanostructure and properties of 40Kh steel

Kyryliv Y.B.¹, Kyryliv V.I.², Maksymiv O.V.²

*¹ Lviv State University of Life Safety,
Kleparivska St., 35, Lviv, 79007, Ukraine
E-mail: yaroslav_kyryliv@ukr.net*

*² Karpenko Physical-Mechanical Institute of the National Academy of
Sciences of Ukraine, Naukova St., 5, Lviv, 79060, Ukraine.*

The study investigates the effect of deformation force on the surface layer of 40Kh steel during vibration-centrifugal hardening (VCH), resulting in the formation of a nanocrystalline structure with enhanced microhardness and wear resistance. The deformation force, controlled by the tool mass and eccentricity, ranges from 477.1 to 2044.5 N and influences grain size (19–43 nm), dislocation density, microhardness, and hardened layer depth. Grain size and dislocation density were determined by X-ray diffraction analysis. The initial ferrite–pearlite structure transforms into a ferrite nanostructure accompanied by cementite dissolution during cold plastic deformation [1].

After thermal treatment, partial surface damage typical of thermal wear is observed, associated with lubricant degradation and the formation of atomic hydrogen. After VCH, the wear surface exhibits a mixed character, and under a contact pressure of 2 MPa and impact forces of 795.1 and 1703.7 N, pits and grooves caused by wear products are formed. The oxygen content is 1.92 wt.% at 795.1 N, decreases to 0.69 wt.% at 1022.2 N, and increases to 2.32 wt.% at 1703.7 N. Changes in the distribution of alloying elements, in particular the depletion of chromium in the surface layer, indicate their redistribution during severe plastic deformation, which leads to an increase in wear resistance of up to 2.5 times.

The microhardness of 40Kh steel as a function of grain size is well described by the Hall–Petch relationship ($R^2 = 0.9942$), and the coefficient $k = 0.0298$ is consistent with literature data. The decrease in grain size leads to increased microhardness, which is associated with low-temperature processing without recrystallization and the activation of a dislocation-based deformation mechanism.

1. Kyryliv, Y., Maksymiv, O., Kyryliv, V. et al. Impact of Deformation Force by Vibration-Centrifugal Hardening on the Properties of the Surface Nanostructure of Steel 40Kh. J. of Materi Eng and Perform 34, 29182–29192 (2025). <https://doi.org/10.1007/s11665-025-11450-9>

Index

A

- Abaloszewa I. 342
 Abramchuk O. 284
 Abramenko L. O. 440
 Afanasieva T.V. 435
 Ageenko I.A. 307
 Akimov, V. 93
 Akopova O.V. 274
 Aksimentyeva O. I. 60, 83,
 452, 533
 Alekseev O.M. 186, 300, 367, 528
 Alekseev S. 328
 Alekseev S.O. 367, 528, 600
 Alhourani N. 541
 Allali D. 165
 Amaral B. P. F. 101
 Amari R. 136, 165
 Amirulloieva N. 6
 Andrievska N. 7
 Andriiash H.S. 302
 Andriyevsky B. 507
 Andrusenko D. A. 367
 Andrushchak H.O. 529
 Anhelov M. 268
 Antonin S.V. 167
 Antonov V. N. 388
 Antuzevics A. 221
 Apopii V. 414
 Arabadzhy M.I. 331
 Ardanova L.I. 599
 Artyukhov A.E. 30, 31, 33
 Artyukhova N.O. 30, 31, 33
 Assaf B.A. 483
 Atamanchuk A.R. 14, 236, 597
 Atamas N. 333
 Averkov O.Yu. 486
 Averkov Yu.O. 486
 Azhniuk Y. M. 82
 Babichuk I.V. 582, 587
 Babiichuk M. 82
 Babkina N.V. 55
 Babuka I. Ya. 143
 Babuka T. Ya. 143
 Bagday S.R. 57
 Bakhmat V.A. 323
 Bakin S.V. 313
 Baklan D.V. 430
 Balabai R.M. 12, 45
 Balabanska I. 558
 Bandura A.I. 443
 Barabash M.Yu. 119
 Barabashko M.S. 64, 509
 Barbash V.A. 40
 Barchuk N.V. 593
 Bardadym I. 284
 Bashev V.F. 172, 234, 442
 Bashmakova N.V. 199, 385, 594
 Baskevych O.S. 78
 Basnukaeva R. M. 64
 Bazylyak L.I. 141
 Bedriy T.R. 39
 Bekenov D. A. 388
 Bekh I.I. 278, 299
 Beletskii N.N. 486
 Belous A. 532
 Bengus S.V. 400
 Benrezgua E. 165
 Berdnikova O.M. 396
 Berest V.P. 436
 Berezhnyi O.Yu. 488
 Bereznyak K.G. 506
 Bereznykov O. V. 151
 Berezovets V.V. 133, 559
 Berezovska N. 385, 401
 Berezovska N.I. 496
 Bergamasco R. 42
 Berketa K.O. 298
 Berko Y.I. 591
 Bernatskyi A.V. 396
 Bersirova O.L. 589
 Bezghubenko P.Y. 537
 Bezguba V. 375
 Bezkrivna O. 253
 Bezrodna T.V. 454
 Biba K.O. 588
 Bigos A. 568
 Bihun R. 414
 Bilanych V.S. 567
 Bilash O.M. 313

B

- Babayevska N. 275
 Babenko N.M. 266
 Babenkov E.A. 589
 Babich D. 375
 Babich L.G. 294
 Babichuk I.S. 582, 587

Chudinovych O.	22
Chudoba T.	22
Chukova O.	375
Chumak A.V.	355
Chumak H.L.	516, 525
Chumalo H.V.	420
Chunikhin O.Yu.	294
Chuprina M.O.	601
Chyslov D.O.	49
Chystota A.V.	364
Constanzo Mata A.D.	298
Cordill M.	204
Coutelier O.	541
Cuberes T.	233
Curmei N.D.	454
Czaja P.	568
Czekanowska D.	221

D

Dan'kiv O.O.	353
Danilchenko V.Yu.	32
Danilenko I.	210
Daniukina O.M.	48
Dankiv O.O.	117
Danko N.V.	153
Danylchenko O.G.	86
Danylchuk M. V.	13
Danylenko I.M.	84, 380, 431, 501
Danyliak M.-O.M.	13, 397
Danyliv O.V.	511
Danylovyh H.V.	297
Danylovyh Yu.V.	297
Daoud L.	290
Datsenko O.I.	402, 403
Davydiuk A.L.	367
Davydovska T.L.	296
Deghfel B.	136, 165
Dekhtyar M.L.	464
Demchenko L.	519
Demchenko V.L.	159, 62, 11, 110, 112, 163
Demchenkov S.O.	80
Demchik I.I.	350
Demediuk, R.	93
Demianenko E.M.	116
Demidov O.O.	531
Demydov P.V.	76, 494
Dereń P.J.	253, 498
Derzhypolska L.A.	470

Destarac M.	541
Deva L.	444
Di Costanzo Mata A.	280
Diamant V.	328
Didenko H.Yu.	320
Diduk I.	530
Diskovskyi I.S.	472
Diyuk V.E.	44, 54, 514, 515, 516
Dmytrenko O.P.	81
Dmytruk A.	432
Dmytruk A.M.	438, 594
Dmytruk I.	199, 385, 401, 432, 496, 594
Dobrovolska A.V.	282
Dolbin A.V.	226
Dolgoshey V.B.	59, 62
Dolgov L.	288
Dong Z.	11, 29
Dontsova T.A.	146, 429
Doronin Yu. S.	348
Doronina D.S.	296
Doroshchuk V.V.	306
Dovbynychuk T.	285
Doycho I. K.	130
Drapailo A.B.	424
Druzhynin A.O.	340, 511
Dubey I.Ya.	293, 336, 594
Dubey L.	293
Dubikovsky O.V.	380, 410
Dubrava T.G.	266
Dudetskaya G.	193, 239
Dudka O.I.	119
Dudnik E.V.	522
Dudnik O.V.	530, 560
Dudok T.	568
Dukhopelnikov E.V.	506
Dumych T.	290
Duque C.	93
Dusheiko M.G.	429
Dyachenko A.	44
Dzevin Ie.M.	32
Dzhagan V.M.	380, 465, 494
Dzhenyuk A.V.	187
Dziadevych S. V.	280
Dzikovskyi V.Ye.	138
Dzyadevych S.V.	298, 317, 323
Dzyazko Yu.S.	41, 42, 56

E

Efimova N.V.	536
--------------	-----

Eledath Changanath M.	223
Eliseev E.A.	2, 3, 4, 5
Eliyashevskyy Yu.I.	124
Elmers H.-J.	483
Evans D.R.	3, 4
Evtukh A.A.	34, 167, 224, 544

F

Fabbrizio V.	221
Fainleib A.M.	140
Fainleib O.M.	127, 255
Falletta E.	221
Fatieiev D.S.	330
Fedchenko O.	483
Fedelesh V.I.	134
Fediai V.D.	326
Fedorchenko A.V.	387
Fedorenko D.V.	548, 550, 595
Fedorenko G.V.	106
Fedorenko L.	473, 476
Fedorus O.G.	426
Fedotov O.	8
Fernández A.	217
Fesenko O.	219, 220, 256, 480, 606, 607, 608, 610, 611
Fesych I. V.	151, 219
Filep M. J.	82, 567
Filonenko D.S.	105
Filonenko O.V.	526
Firstov S.A.	72
Firstov S.O.	501
Fitio V.M.	450
Fiukowski O.	312, 315
Fliahin R.V.	449
Fodchuk, I.	93
Foia O.	347
Follath R.	375
Fomenko L.S.	123
Forys I.S.	297
Franchuk O.	315
Frolov Yu.O.	68
Frolova L. A.	78
Furdyna J. K.	483
Futimsky S.I.	216, 252

G

Gaevska Yu.O.	266
Gaidai S.	44
Galiy P.V.	549

Galloni M.G.	221
Galstian I.Ye.	53
Galtsov N.N.	466
Gancarz T.	568
Gaponov A.M.	81
Garkusha I.E.	416
Garmanchuk L.	285
Garmasheva I.	606
Gavrilchenko I.V.	209
Gavryliuk N.A.	116
Gavryushenko D.A.	333, 354, 361
Gavryushenko D.O.	346
Gęca I.	109
Gerstein G.	352
Get'man E.I.	599
Gilchuk A.V.	370
Gineste S.	562
Gladkov E.S.	457, 531, 536
Głuchowski P.	480
Glukhov K. E.	143
Gnatenko Yu.P.	569
Gnatyuk I.I.	594
Gnyniuk V.	73
Godzierz M.	235
Golovchak R.	181
Golovynska Iu.	8
Golovynskiy S.	8
Goltsev A.M.	266
Golub A.A.	210, 309, 405
Golub V.	75, 79
Gomeniuk Yu.V.	357
Gomonnai A. V.	82
Gonchar O.M.	147, 216, 252, 525
Goncharova I.	482
Goncharuk O.V.	553
González-Fernández S.	217
Gorban O.	210
Gorbanyuk T.I.	34, 224, 544
Gorelov B.M.	116
Goshovska Y.V.	279
Grande D.	127, 140, 255
Grankina I.I.	439
Grazulevicius J.V.	444
Grebenyuk A.G.	526
Grechanyuk I.	521, 534, 535, 572
Grechanyuk M.	520
Grechanyuk V.	520, 521, 534, 535, 572
Grechnev G.E.	387

Grigoriev A.N. 354
 Grigoryeva O.P. 127, 140, 255
 Grippa A. 498
 Grishchenko L.M. 80, 514,
 515, 516, 525
 Gruschwitz M. 408
 Grygorczuk-Płaneta K. 553
 Grygorova G.V. 193, 239,
 271, 272, 273,
 275, 276, 524
 Gryn D.V. 329
 Gryn S.V. 209, 328
 Grynko D.A. 537
 Grzegórska A. 221
 Gudenko J.M. 132
 Gudenko Yu. 607
 Gudyma Iu.V. 88
 Gudymenko O.I. 465
 Gudymenko O.Yo. 410
 Guichaoua D. 482
 Guillot P. 562
 Gule E. 415
 Gumenna M.A. 384, 566
 Gusakova K.G. 127, 140, 255
 Gutsul V.I. 351
 Guzenko N.V. 553
 Guzeva V. 74
 Guzii S. 504
 Gvozдовskyy I.A. 132, 395

H

Hadzaman I. 196, 232
 Haiduchok V. 584
 Haiduk V. 316
 Hamalii N.V. 468
 Hamalii O.V. 477
 Hamorak H. 332
 Havii V. 46
 Havryliuk O.O. 526
 Haydukivska K. 422
 Hellmann R. 395
 Herkaliuk M.V. 370
 Hes N. 512
 Hetman D. 534
 Hirskyy Yu. 164, 225, 360
 Hladkovska N.O. 506
 Hloskovsky A. 375, 378
 Hnatiuk, K.I. 300, 600
 Holomb R.M. 145
 Holovatska N.H. 363

Holovatsky V.A. 363
 Holyboroda S.I. 450
 Honcharova L.A. 55
 Honcharuk D.K. 300, 349
 Horban S.O. 416
 Horbatenko Yu.V. 64, 89, 226
 Horbenko Y. Y. 60, 83,
 127, 171
 Hozhdzynskyy S. 11
 Hrabovskyy Ye. 199, 385, 401
 Hrankina S.S. 439
 Hreb V. 125, 164, 225, 227
 Hrebelna Yu.V. 11, 29
 Hryhorovych O.A. 117
 Hryn V. 220, 256, 594, 606, 607
 Hrytsuliak H. 95, 318
 Huang H.C. 566
 Hubetska T. 163, 217
 Hudimov M.I. 427
 Hurmach V. 269
 Hutsul Kh.R. 159, 177, 326
 Hutsul T.V. 451

I

Iakovlev V.Ie. 32
 Iatsenko A. 580
 Ichiyanagi Y. 483
 Ichou B. 562
 Ignatenko O.M. 11, 29
 Ilashchuk M.I. 293, 529
 Ilchenko M.M. 336
 Ilchenko V.V. 167
 Ilchuk H.A. 507
 Iliash S.A. 569
 Ilkiv B. 407
 Ilkiv B. 347
 Ilnytskyi J. 422, 596
 Ilyin P.P. 81
 Indutnyi I.Z. 495
 Ingram A. 195
 Isaiev M.V. 346
 Ishchenko O. 44
 Iukhymenko N. 65
 Iurkevych R.M. 128, 419, 420
 Iurzhenko M. V. 59, 62
 Ivachkin Ya.O. 105, 152
 Ivakh M.S. 228
 Ivakhnenko S.O. 431
 Ivanchenko S.E. 132
 Ivanenko K.O. 11, 29

Ivanichok N.Y.	39
Ivanisenko Yu.	66
Ivanitska V.G.	475
Ivaniuk K. B.	21, 455
Ivaniuk Kh.	444
Ivanov O.	273, 578
Ivanova jr. N.	304
Ivanova N.	304
Ivanova O.M.	305
Ivanytsya M.O.	296, 331
Ivasenko I.B.	420
Ivashchyshyn F.	444
Ivasiv V.	312, 315, 319
Izai V. Y.	82
Izmailov I.A.	476

J

Jangra V.	357
Jaroslav Ilnytskyi	142
Jarzębska A.	568
Jeżowski A.	509

K

Kabantsev T.G.	592
Kachurak Yu. M.	455, 461
Kadan V.M.	594
Kahoul A.	136
Kakazei G.	75
Kalchenko V.I.	424
Kaleinikova O.	286
Kalenyuk O.A.	216, 252
Kalinin S.V.	2, 3
Kalinina T.V.	442
Kalinovych V.	423
Kalychak Ya.M.	57
Kalynovsky P.P.	105
Kalyuzhnyi O.	596
Kamarchuk G. V.	343, 348
Kamenskyh D.S.	241
Kanyuk Yu.I.	128
Kapliienko O.O.	490
Kapp M.	192
Kapush O.A.	96
Karabanova L.V.	55
Karachevtsev V.A.	229
Karachevtseva L.A.	126, 398, 399
Karakurkchi H.V.	27
Karandas Ya. V.	344
Karbiwska L. I.	168

Karbiwsky V.L.	381, 382, 523, 565, 576, 578
Karbovnyk I.	155, 197, 203, 205
Karlash A.Y.	438
Karpenko Yu.V.	322
Karpichev Y.	508
Karpov S.O.	47
Kartel M.T.	11, 29, 126
Karvatskiy I.N.	289
Kashirina N.I.	585
Kashuba A.I.	507
Kasianchuk M.K.	402
Katkov B.	503
Kavok N.	239
Kavok N.	193
Kaykan L.	332
Kayntz D.I.	467
Kazarinov Yu.	210
Kazaryna O.V.	160
Kechun L.	308
Khalameida S.V.	57, 58
Khalavka Y.B.	176, 475, 573
Kharchenko Y.V.	558
Kharkhalis L. Yu.	143
Kharlan J.	75, 79
Khobzei M.M.	451
Kholkin A.	221
Khomenko D.M.	460
Khomenkova L.Yu.	67, 170
Khomych I.A.	386, 478
Khora O.V.	116
Khort P.	8
Khovanets' G.I.	160
Khovavko A.I.	105, 152
Khoverko Y.M.	340, 511
Khramova T.	379
Khrysto O.I.	28, 249
Khrystyna V.	173
Khutko M.M.	76
Khyzhun O.	347
Kilanski L.	392
Kiose T.O.	48
Kirian I. M.	150
Kirina I.	319
Kishchuk I.P.	573
Kislyuk V.V.	384
Klepko O.Yu.	80
Klepko V.V.	90, 242, 274
Klima J.	79
Klimenko I.	118
Klimenkov O.M.	429

- Klishevich G.V. 454, 594
 Klochkov V. 271, 273, 276
 Klos J. 79
 Klym H. 155, 195, 196, 197, 202,
 203, 205, 232
 Klyuchivska O.Yu. 58
 Kobrina L.V. 90, 242
 Kobylinska N. 163, 217
 Kobzar I.P. 387
 Koch J. 408
 Kochetova S.A. 589
 Kofliuk I. M. 184
 Kokhan I.V. 230
 Kokhan O.P. 567
 Kolendo A. 65
 Kolesnichenko V. 598
 Koliada Y. 566
 Kolkovska H.M. 39
 Kolkovskiy P.I. 39
 Kolomiets D.I. 190, 586
 Kolomys O.F. 380
 Kolomys O.F. 14, 380
 Kolotilov S.V. 246, 296,
 306, 331
 Kolupaev B. S. 175
 Kolupaev B.B. 43
 Kolyadina O. Yu. 170
 Komarov A.O. 80
 Kondrat O.B. 145
 Kondrat O.O. 145
 Kondratenko O. 483
 Kondratenko S.V. 402, 403
 Kondratov O. 7
 Kononiuk O.P. 133
 Konotop O.P. 85, 86
 Konovalova V. 285
 Konstantinovich I.A. 351
 Kopa I. 189
 Kopach V.V. 176
 Koplak O. 414, 513
 Kordan V.M. 83
 Kordyuk A. 375
 Korenivski V. 532
 Korn T. 448
 Korneliuk O.I. 345
 Korneychuk A.V. 467
 Korniienko O.A. 236, 597
 Korniy S.A. 13
 Korochkova T.Ye. 365, 377
 Korohodska A.M. 27
 Korolkov R. Yu. 344, 449, 488, 491,
 493
 Korolov O.I. 143
 Korolyuk O. A. 64, 226,
 509
 Koronovskyy V.E. 144, 201
 Korop A.O. 176
 Korostil A.M. 339, 359
 Korotash I.V. 161, 250, 468, 477
 Korotun A.V. 49, 440, 441, 447, 449,
 489, 490, 492, 493
 Kosevich M.V. 229, 436
 Kosinov O.V. 47
 Kostiv Yu. 196, 202, 232
 Kosulia O.V. 410, 465
 Kot K.V. 302
 Kot Yu. 193, 239, 302
 Kotrechko S.O. 384
 Kotsyubynska Y. 318
 Kotsyubynsky A. 95, 318
 Kovadlo V. 606, 607
 Koval M.V. 529
 Koval'chuk I.V. 128, 419, 420
 Kovalenko M. V. 138, 459
 Kovalenko T.V. 431
 Kovalenko Y. 258
 Kovalskiy A. 181
 Kovanzhi P.O. 402
 Kovbasiuk T.M. 412
 Kovtun G.I. 233
 Kovtun K.V. 47
 Kovtun Yu.V. 47
 Kozak A.Yu. 171
 Kozakevych R. 405, 575, 581
 Kozan N. 318
 Kozhukhovska R.A. 35
 Koziarskiy D.P. 529
 Koziarskiy I. P. 418, 529
 Kozlov O.V. 97
 Kozyrev A. 520, 534, 535
 Kozyrev A.V. 572
 Krakovskiy S.M. 402
 Krasnopyorova A.P. 536
 Kravchenko S.O. 167, 424
 Kravchenko V.V. 542, 601
 Kravets A. 519, 532
 Kredentser S. 473
 Kredentser S. 121
 Kremenskoy M. 54, 84, 211
 Kremenskoy M.O. 186
 Kremer I.P. 228
 Krivchikov A. I. 64, 89, 226, 509

Len E.G.	53
Len T.	61
Len T.A.	157
Len T.S.	53
Leonenko E.	219, 220, 256, 445, 606
Lepikh Ya. I.	130
Levchuk V.V.	43
Levenets A.V.	123
Levintant-Zayonts N.	568
Liakhovetskyi V.	262
Liao K.	66
Liashuk T. H.	175
Liaskovska M.	95, 318
Lihezin S.L.	139
Lisetski L.M.	228, 395, 439
Lishchuk P. O.	104, 504
Lishchuk P.O.	156
Lisiecki R.	253
Lisnyak V.V.	54, 84, 514, 515, 516, 525
Lisnykh D.O.	340
Litiuga O. V.	546
Litoshenko D.V.	548, 550, 595
Litvinov S.V.	320
Litynska M.	258, 259, 260
Liu J.	582
Liu X.	483
Lizhen W.	308
Lizunova S.V.	350
Lizunov V.V.	350
Lobanov V.V.	116, 526
Loburets A.T.	426
Lochbrunner S.	448
Logosha A.V.	387
Łojkowski W.	22
Lopatynskyi A.M.	76
Lopushansky V. V.	82
Los M.V.	369
Losytskyy M.Y.	309
Lozovski V.	178
Lubenets S.V.	123
Luchechko A.	180, 181, 474, 584
Luchechko A.P.	591
Lupan M.	271, 272, 273, 275, 276, 524
Lutsenko O.D.	266
Lutsyuk I.	225, 227
Lutyuk Y.G.	43
Lyakhno V.Yu.	400
Lyashchuk Yu. M.	495
Lyashenko Yu.O.	190
Lynnyk D.	95

Lyogenkaya A.A.	387
Lys R.	564
Lys R.M.	563
Lysakovskiy V.V.	431
Lysenko R.	74
Lysenko V.	74
Lysenkov E.A.	97
Lytvyn P.M.	403, 431, 465, 495
Lytvyn V.K.	76
Lytvynenko A.P.	286, 289
Lytvynenko O.O.	126
Lytvynenko Y.	483
Lyuty P.Y.	551, 552, 557
Lizunov V.V.	350

M

Mahlovanyi B.	181
Maier H. J.	352
Maiko K.O.	496, 527
Maikovich O.V.	248
Maistat M.S.	139
Maistruk E. V.	418, 529
Makar T.R.	549
Makarenko L.I.	350
Makarets M.	333
Makarevich R.	199, 385
Makarova M.B.	305
Makarova O.A.	282
Makevich N.	332
Makhanets O.M.	351
Makhno S.M.	11, 29
Makido O.Yu.	160
Makogon Iu.M.	119
Makrukha T.O.	28, 249
Maksimchuk P.	239, 273, 276
Maksimchuk P.O.	193, 271, 272, 524
Maksymchuk D. M.	184
Maksymchuk V.	285
Maksymiv O.V.	434
Maksymovich N.P.	107
Maksymtsev Yu. R.	175
Maksymuk V.S.	218
Makudera A.O.	560
Malakhovska T.O.	567
Malanych G.P.	394
Maliuk M.V.	405
Maliuta S.V.	421
Malovycho V.D.	525
Malvi Ye.V.	478

Nakamura T. 407
 Nashchekina O. 379
 Nastiuk Ya.S. 114
 Naumenko A. 198, 212, 237, 238
 Naumenko A.M. 296
 Naumenko A.P. 81
 Naumov V.V. 476
 Navozenko O. 198, 212
 Navozenko O. 238
 Nazarenko V.G. 548, 550, 595
 Nazarkovsky M.A. 101
 Nazarov A. 115
 Nazarov A.M. 402
 Nazarov A.N. 357
 Nazarova N.S. 52
 Nebesnyi A.A. 105, 152
 Nebesnyi R. 312, 315, 319
 Nebola I.I. 467
 Nechytailo B.V. 435
 Nechytaylo V. 473
 Nediélko M.S. 215
 Nedilko S.G. 186, 211, 214, 215
 Nedozhdii O. 352
 Negriyko A.M. 432, 463,
 470, 484
 Negrutska V. 293
 Nenчук T.M. 549
 Nesmiyan K.S. 571
 Nesprava V.V. 454
 Netreba S.V. 307
 Neuhodov Ye. 193, 239
 Neves C.S. 506
 Niibo P. 288
 Nikitenko V.N. 589
 Nikitenko Y. 432
 Nikitin D.O. 78
 Nikolaenko T.Y. 345
 Nikolaenko V. A. 389
 Nikolaienko A.O. 432, 438
 Nikolenko A.S. 84, 431
 Ninyovskij V.V. 174, 240
 Nizhnik B.O. 23
 Nizkova G.I. 350
 Nosenko A.V. 510
 Nosenko V.K. 510
 Nosenko V.V. 67
 Noskov Yu.V. 514, 515
 Nosova N.G. 248
 Nowak P. 375
 Nozdrenko D. 268, 284
 Nykyruy L.I. 540

Nykyruy Yu.S. 154, 162,
 206, 574

O

Oberemok O.S. 410
 Obukhova T.Yu. 421
 Ohtsuka M. 407
 Ohulchanskyi T.Y. 282
 Oleksenko L.P. 48, 106, 107
 Oleksyn Z. R. 540
 Olenych I.B. 171
 Oliinyk A.O. 171
 Oliinyk V.O. 108
 Olikh O.Ya. 94, 104, 211
 Onanko A.P. 81
 Onanko Y.A. 81
 Onishchenko A. 193, 239,
 273, 276
 Onufrijevs P.O. 170
 Onyshchenko V.F. 398, 399
 Onysko M. I. 459
 Opalińska A. 22
 Opanasyuk A.S. 569
 Opeida I.A. 547
 Oprysk V. 173
 Orletsnyi I.G. 529
 Orlov A.K. 188
 Osokin Y.S. 517
 Ostapenko O.S. 278, 299
 Ostapenko R.V. 561
 Ostapiuk L.M. 57
 Ovdenko V.O. 113, 171
 Ovsiienko I.V. 54, 61, 84,
 94, 156, 162
 Ozga P. 568

P

Paciornik S. 101
 Pacola Gonçalves I. 42
 Palchekovskyi O.A. 188
 Pampuha I. 268
 Panchenko A.I. 294
 Panchuk R. 308
 Panfilov A.S. 387
 Panko A.V. 306, 307
 Panteleimonov A. 508
 Parka J. 121
 Paryzhak S. 290
 Pashevniuk V. P. 64

Pasichnyy M.O.	586	Politanskyi R.L.	472
Pastushenko M.O.	572	Polotskyi D.Yu.	161, 468, 477
Patrylak L.K.	23	Polovkovych S.	319
Pauk A.	200	Poltoratska T.	598
Pavlenko O.L.	81, 218	Polushkin Yu.A.	384
Pavliuk A.	312, 315	Polyakov S.V.	546
Pavliuk D.	65	Polynchuk P. Yu.	10
Pavlosiuk O.	340	Popadiuk D.	532
Pavlov V.O.	601	Popilovskiy N.	154, 200, 574
Pavlyk B.V.	563	Popov M.O.	516, 525
Pazukha I.M.	20	Popova A.V.	114
Pecková E.	208, 251	Popovych A.M.	538
Pedan R.	194	Popovych M.S.	190
Pelloquin D.	182	Poroshin V.N.	132
Penyukh B.	414	Portier X.	182
Perekos A.O.	519, 592	Pospelov O. E.	343
Perepelytsya S.M.	517, 528, 600	Pospelov O. P.	187, 343
Perets Yu.S.	54, 61, 84, 94, 156	Posuvailo V.M.	419, 420
Perlova O.V.	56	Potapenko H.V.	108
Permyakova N.M.	90, 242	Potapenko O.V.	108
Pertko O.P.	23, 166, 241	Potomkina Zh. V.	463, 484
Petrovska S.	347, 407	Potsiluiko-Hryhoriak H.V.	462
Piasetska A.V.	176	Povazhnyi V.A.	241
Piatova A.V.	152	Poyedinok N.L.	463, 484
Pich A.	312, 315	Press V.M.	12
Pikalov A.I.	47	Priakhin V.Ye.	502
Pinchuk N.	598	Pribytova E.	79
Pinchuk-Rugal T.M.	81	Prokopenko V.A.	246, 307
Pinel R.	343	Proskurnyak R.V.	128
Pini Pereira P.	42	Prudius S.	512
Pino M.V.	467	Pruntseva G.O.	327
Pirro P.	341	Prylutskyi Yu.I.	267, 268, 269, 284
Pisklova P.V.	448	Pryshliak O.S.	45
Plevachuk Yu.	162	Prystash M.S.	28, 249
Plyushchay I.V.	162	Pstruś J.	568
Plyushchay O.I.	103	Pundyk I.	199, 385
Pocherpailo A.A.	402, 403	Pushak A.	498
Podhayetska Yu.Yu.	296	Puz'niak R.	342
Podhurska V.	423, 433	Puzko O.A.	382
Podolskiy A.V.	87	Pylypchuk O.S.	132
Podrezov Yu.M.	501	Pylypenko A.	235
Podshebiakin A.O.	445	Pylypenko A.M.	548
Pogodin A. I.	82, 567	Pylypenko O.V.	20
Pogosov V.V.	489	Pylypko V.G.	475, 573
Pohrebniak N.I.	282	Pylypov A.I.	34, 224
Pohrelyuk I.M.	397, 419, 420	Pylypova O.V.	34, 73, 74, 224
Pokholenko O.	328		
Polek T.I.	129		
Polishchuk D.M.	129		
Polishchuk S.S.	161, 216, 252, 592		
		R	
		Rachiy B.I.	39

Radchenko T.M. 364, 369
 Radio S.V. 114, 599
 Raleev M. 606
 Radykhovskiy S. P. 540
 Rak V.I. 416
 Rakushev D.M. 410
 Rakytska T.L. 48
 Rallev M. 219, 220, 256, 480, 610
 Rashydov N.M. 320
 Raskola L.A. 48
 Rebrova N. 498
 Red'ko V. 522, 530, 560
 Reshetnyak O.V. 125
 Reva V.I. 49, 449, 491, 492, 493
 Riabinin S.O. 139
 Riabov S.V. 230
 Riabtsev S.I. 442
 Ribeiro A.C. 42
 Ripko O.P. 106, 107
 Ritter U. 268, 284
 Rivkin L. 375
 Rizun O.V. 267
 Rodik R.V. 297
 Rodin D.O. 78
 Rogachova O. 379
 Rokhiv V.V. 487
 Romaniuk S.P. 416
 Romanovska N. 385, 401
 Romantsova O.O. 226
 Romanyuk B.M. 410
 Romanyuk V.R. 167, 401, 483
 Ropakova I.Yu. 439
 Roshal A.D. 457, 531, 536,
 Roshal O. 543
 Rouquier Ph. 482
 Rozenbaum E.V. 320
 Rozhdestvenska L.M. 41
 Ruban O. 530
 Rud A. D. 150, 168
 Rudavskiy I. 202
 Rudenko E.M. 161, 250, 468, 477
 Rudenko T.O. 357
 Rudenko V. 262
 Rudko G. 115, 415
 Rudko M. 155
 Rudnikov E. G. 588
 Rugal O.G. 81
 Rusakov V. F. 342
 Rusakova H.V. 123
 Ryabstev S.I. 172, 234
 Ryabukhin S.V. 331

Rybalchenko N.P. 111

S

Sabov T.M. 167, 465
 Sachko A.V. 573
 Safonov M.S. 599
 Safonov V. 118
 Sagan V.V. 89, 226
 Sahraoui B. 482
 Saiz J. 221
 Sakhnenko M.D. 27, 187
 Salak A.N. 506
 Salamo G.J. 403
 Salazar H. 221
 Saltykov D.O. 20
 Salyuk O. 75, 79
 Samaryk V.Y. 248
 Samchenko K. 598
 Samchenko Yu. 598
 Samoilov O.M. 271, 273, 276, 439
 Sanchez-Royo Juan F. 223
 Sandhop M. 375
 Sarakovskis A. 221
 Sarikov A. 366, 368
 Savchenko B.M. 157
 Savchenko D. 519
 Savchenko I. 98, 244
 Savchenko V. 7
 Savka S.S. 372, 590
 Schaflier E. 87
 Schlein E. 518
 Schlueter Ch. 378
 Schnakenberg U. 312
 Schönhense G. 483
 Schröer J. 448
 Schur D.V. 116
 Schvernyk V.R. 92
 Schwarz S. 395
 Sedda A. 61
 Sembratovych N.V. 154
 Semchuk O.Yu. 526
 Semenenko M.O. 421
 Semenko M.P. 401, 561
 Sementsov Yu.I. 11, 29
 Semerenko Yu. O. 7, 66, 466
 Seminko V. 193, 239, 273,
 275, 276, 524
 Seminko V.V. 271, 272
 Semjonova A. 6
 Semkiv I.V. 507

Semyrga O.M.	510	Shut M.I.	94
Sencha-Glevatska K.V.	279	Shvachka A.	503
Sencha-Hlevatska K.	285	Shvachko N.K.	565, 576, 578
Serdechnova M.	221	Shvets O.V.	246, 306, 546, 579
Serdiuk I.V.	416	Shvydkyi M.A.	493
Serednytski A.S.	372, 590	Shylo S.I.	49, 447, 490
Sergeyeva T.	293	Shymanskyi M.V.	554
Sergiienko R.	407	Shymchyshyn O.Y.	228
Serhiichuk S.S.	76, 494	Shyrokopoiias O.O.	492
Seti J.	461	Shyrovkov O.V.	236, 597
Sevastyanova O.B.	149	Shyvaniuk V. N.	150, 384
Sevostianov S.	575, 581	Sichenko R.	368
Shakun Ilia.	363	Sichkar T.G.	94
Shalai Ya.R.	287	Siharova N.V.	11, 29
Shapovalov A.P.	216, 252	Sikora M.	375
Shapovalov V.	432, 521, 535	Sinelnikov S.I.	230
Shatnii T.D.	53	Siora O.V.	396
Shcherbak O.V.	324, 334	Šipkova A.	208, 251
Shcherban N. D.	189, 546, 579	Sirak Ya. Ya.	419
Shchetinin M.S.	458	Siraya O.A.	161, 477
Sheludko V.I.	215	Sirosh V.A.	108
Sheludko Y.V.	547	Skakunova O.S.	350
Shender I.O.	567	Sknar I.V.	78
Sheparovych R.B.	547	Skorobogatyi T.V.	413
Shepel H.S.	386, 478	Skorokhyd N.	308
Shepida M.V.	409, 456	Skoryk M. A.	150, 153, 168, 431
Shevchenko V. B.	104	Skrypnychuk V.V.	141, 456
Shevchenko V.V.	548, 550, 566, 595	Skryshevsky V.	73, 74
Shevchuk L.M.	57	Slavin A.N.	356
Shevtsova T.	360	Slipchenko M.	518
Shirshov Yu.M.	424	Slobodian O.M.	357
Shishkina S.V.	531	Slobodianiuk D.V.	341
Shkryl' O.O.	59, 62	Slobodyanik M.S.	571
Shkurdoda Yu.O.	20	Slobodzyan D.	180, 181, 474, 584
Shlapa Yu.	532	Slynko V.E.	392
Shlykov S.G.	294	Slyotov M.M.	453, 462
Shniruk O.M.	40	Slyotov O.M.	453, 462
Shovkopliias O.S.	345	Smirnov S.N.	66, 72
Shoportun Y.V.	346	Smokal V.O.	9, 460
Shpotyuk Y.	181	Smolts D.	65
Shpylovyy P.B.	68	Smolyak S.S.	578
Shtablavyi I.	162, 200, 428, 574	Smyk N.I.	149
Shtapenko E.Ph.	427	Snigur A.V.	105
Shtepa D.	310	Snizhko A.D.	457
Shulga S.M.	302	Snizhko D.V.	313, 518
Shulha Y.	316	Snopok B.A.	424
Shulhach A.S.	557	Sokoliuk D.	235
Shulyma S.I.	565, 576	Sokolov S.O.	47
Shulzhenko D.M.	127, 140, 255	Sokolov S.S.	376
Shut A.M.	94	Sokolovskyi I.O.	167

- Sokolovskiy M.V. 396
 Soldatkin O.O. 280, 298,
 317, 323
 Solodovnik A.A. 85
 Solodukha H.A. 542, 601
 Sologub S. 408
 Solomenko A.G. 369
 Solopan S. 532
 Soloviev S.O. 166
 Solovjov A. 61
 Solovyov M.V. 507
 Soltys A.M. 39
 Sopinsky M.V. 167, 170, 495
 Sorokin O.V. 439, 448
 Sosnovska M.O. 528, 600
 Sova N.V. 157
 Sribna V.O. 286, 289
 Stadnik V. 164, 225, 227
 Stakhira P.Y. 21, 444, 455
 Stakhira P.I. 458
 Stanitska M. 444
 Starinets S. 606, 610
 Starostenko O.M. 127, 140, 255
 Starynets S. M. 391
 Starushenko K. 428
 Starykov H. 127
 Starynets S. 611
 Stasiuk A.V. 91
 Steller J. 118
 Stelmakh S. 22, 580, 598
 Stepanova I.I. 27
 Sternik, D. 98, 244
 Stets V.Y. 137
 Stetsenko D. O. 132, 151
 Stetsiuk A.V. 164, 528, 600
 Stetsiv Yu.A. 125
 Stetsko A.E. 26
 Stoika R.S. 58, 308
 Stoiko N.Y. 552
 Stolbovyi V.O. 416
 Stolyarchuk A.I. 117, 353
 Stolyarchuk I.D. 117, 353
 Storozhuk O. S. 40
 Stratilat D.P. 386, 478
 Strativnov E.V. 105, 152
 Strelchuk V.V. 84, 380, 431
 Strikha M.V. 2
 Strilchuk O. 415, 566
 Strizhak P.E. 137, 330
 Stronska O.J. 126
 Studzinsky S.L. 542, 601
 Stupak I. 285
 Styopkin V. 262, 473
 Subbotin S.Yu. 114
 Sukhenko I.V. 381, 382, 523
 Sukhomlyn V. 503
 Sulym I. 562
 Sungurov B.S. 47
 Sushko M. Ya. 100, 247
 Sušinska J. 6
 Svavil'nyi M.Ye. 161, 468, 477
 Svechnikova O.S. 349
 Svitailo O.S. 301
 Świątek Z. 568
 Sych O. 22, 120, 580, 598
 Sydorchuk V.V. 57
 Sydorenko M.A. 152
 Sydorenko O.O. 81
 Synytsia A. 120
 Syrotynska I. 332
 Syrovatko V.O. 427
 Syrovatko Yu.V. 427
 Syvorotka I. 584
 Syzonenko O.M. 28, 249
 Szałaj U. 22
 Szewczyk D. 509
- ## T
- Tabachnikova E.D. 7, 66, 72,
 87, 123
 Tadiotto J. 316
 Taran A.V. 416
 Tarasov G. 178, 182
 Tarasov G.G. 465
 Tarasov O.F. 501
 Tarasova K.V. 289
 Tarbi A. 482
 Tarnyik G. 333
 Tatarenko V.A. 364, 369
 Tataryn N. 483
 Tegenkamp C. 408
 Terebilenko K.V. 538, 570, 571
 Terekhov A. 61
 Terentyeva Yu.G. 527
 Terets M.I. 11, 29
 Tertykh V.A. 405, 575, 581
 Tigonova O.O. 302
 Tikhonov E.A. 445
 Tikhonovsky M.A. 72, 123
 Timoshevskii A.N. 352
 Titenko A. 519, 592

Titenko O. 519
 Titov I.M. 49, 491, 492
 Tiutiunnyk A. 93
 Tkach N. 198, 238
 Tkach O. 483
 Tkach R.A. 309
 Tkach V.O. 451
 Tkachenko A.A. 348
 Tkachenko I.M. 548, 550, 595
 Tkachenko T.V. 46, 241
 Tkachenko V. 606, 610
 Tkachuk N.S. 546
 Tkachuk O.V. 128, 419, 420
 Tkachuk T. 202
 Tolochko A.S. 550
 Tolochko A.S. 595
 Tolochyn O. 192, 204
 Tolochyna O. 192, 204
 Tolstolutska G.D. 47
 Tomala R. 480
 Tomashyk V.M. 394
 Tomila T. 22, 580
 Tomina A.-M.V. 442
 Toron B. 235
 Torpakov A.S. 28, 249
 Tortika O.S. 7, 123
 Tovarnitskii M.V. 392
 Tovstenko-Zabelin M.S. 274
 Tovstolytkin A.I. 129, 301, 532
 Trachevski V. 168
 Trachevskiy V.V. 255
 Trachevskij V.V. 384
 Trachevskiy V.V. 519, 592
 Trelka-Druzic A. 568
 Trishchuk L.I. 96
 Trishchuk R.L. 96
 Trostianchyn A.M. 412, 552
 Trots V.V. 146
 Trubitsyn M.P. 374
 Trush S.O. 365
 Trypolskyi A.I. 137, 330
 Tsapko Ye.A. 53
 Tsapovska Zh. Ya. 184
 Tsizh B.R. 60, 452
 Tsud N. 145
 Tsukruk V.V. 566
 Tsuvariev O.Yu. 34, 224
 Tsybrii Z.F. 161, 477
 Tsyhanovych O.A. 307
 Tsybalyuk O.V. 296
 Tulupenko, V. 93

Turchak S. 225, 227
 Turko B.I. 155, 171
 Tuziak O.Ya. 549
 Tyberkevych V.S. 356
 Tykhovskiy O.V. 207
 Tymkiv Yu.V. 563, 564
 Tyshchenko Y.S. 522
 Tyshyk Y. 423

U

Ubizskii S. 225, 227
 Uklein A. V. 113
 Urbanek M. 79
 Urbańczyk M. 558
 Ustinov A.I. 80
 Ustinov O.M. 280, 298

Z

Zahorulko I. 384

V

Vainberg V.V. 132
 Vakhovskiy Y.R. 280
 Vakiv O. 584
 Vakula V. L. 348
 Vakyla Y.A. 144, 201
 Valge L. 288
 Varenjuk I. 268, 284
 Varvarenko S.M. 248
 Vashchenko O. 543
 Vasil'yev V. 155
 Vasin A. 115
 Vasylichyshyn. 232
 Vasylichyshyn I. 195
 Vasylechko L. 164, 225, 227
 Vasylechko V.O. 57, 58
 Vasyliiev T. 178
 Vasyliuk-Zaitseva S.V. 588
 Vasyliv B.D. 551, 552, 554,
 555, 556, 557, 558
 Vasylytsiv V. 474, 584
 Vasylyk Y.V. 350
 Vasylyuk S. 254
 Vasylyuk- Zaitseva S. 310
 Vavrukh V.I. 551, 552, 554,
 555, 556, 557, 558
 Veklich A.N. 174, 240

Velbovets A.R. 296
 Veltruská K. 423
 Venhryn Yu.I. 590
 Verba R.V. 341, 355, 356
 Verbinska G.M. 588
 Verbovytsky Yu.V. 122, 173,
 330, 559
 Verbytska T.I. 119
 Vergun L.Yu. 349
 Vernyhor O.L. 450
 Vertii A.O. 36
 Veselsky S.P. 296
 Viduta L. 473
 Vinnychenko D.V. 52
 Vinnychenko I. L. 52, 150
 Vira V.V. 551, 552, 554,
 555, 556, 557, 558
 Virt I.S. 593
 Virych P. 9, 270, 292
 Vistak M.V. 472
 Vlad K.I. 559
 Vlad Kh.I. 122, 133
 Vlad Kh.I. 133
 Vladimirova T.P. 350
 Vladymyrskiy I. 194
 Vlasenko T.S. 361
 Vlasiuk O.M. 528, 600
 Vodoriz O. 379
 Voichenko Ye.I. 177
 Voinalovych A.S. 570
 Voisin L. 407
 Voitenko Z. 316
 Voitovych I. S. 175
 Volnianskii M.D. 374
 Volnyanskii D.M. 331, 374
 Volodymyr Z. 508
 Voloshinovskii A. 498
 Voloshko S.M. 119, 194
 Voloshyna Yu.G. 241
 Volynets V.Yu. 125
 Volyniuk D. 444
 Vorona I.P. 67
 Vorona V. 46
 Voropai G.V. 81
 Vovchenko L.L. 54, 94, 156, 157
 Voynarovych I. M. 82
 Voynash V.Z. 153
 Voyteshenko I.S. 296
 Voznesenska T.Y. 289
 Voznesenskaya T. 286
 Vretik L.O. 282

Vucetic S. 189
 Vynogradova-Anyk O.O. 289
 Vyshnevskaya Yu.P. 545

W

Wach A. 375
 Wagner J. 312
 Wang Q. 341, 355
 Wang T. 587
 Wawrzyniak A. 375
 Wiechecki J. 375
 Wolf M. 298
 Wolter S. 448
 Wosinski T. 483
 Wu M. 11
 Wu M. 29

X

Xu G. 313

Y

Yakovenko A.V. 23
 Yakovenko O. 54
 Yakovenko O.S. 84, 156, 157
 Yakovlev I. 73
 Yakovliev A. 375
 Yakusha V. 432
 Yang J. 582, 587
 Yanovska E. 98, 244
 Yarema B.V. 138
 Yaremchuk I. 461
 Yaremchuk I.Y. 21, 455,
 456, 458, 487
 Yaremkevych A. 219, 220, 256
 Yaremov P.S. 546
 Yarynka D. 293
 Yashchenko O. 40, 530
 Yashchuk V.P. 445
 Yastrubchak O. 483
 Yatsiuk M.V. 81
 Yatskiv R. 418
 Yatsyshyn M. M. 125
 Yavorska L.O. 540
 Yavorskyi R. S. 540
 Yefimova S. 193, 239,
 273, 275, 276
 Yefimova S.L. 271, 272,

	439, 448, 524	Zasadnyy T.M.	128
Yemets A.I.	314	Zatovsky I.V.	246, 306, 307
Yermolenko I.Yu.	187	Zavaliy I.	173
Yeshchenko M.O.	9, 270	Zavaliy I.Yu.	122, 133, 173, 330, 559
Yeshchenko O.	8, 115, 294		
Yevdokymenko V.O.	241	Zayachuk D.M.	417
Yevych Y.	580	Zehetbauer M. J.	87
Yukhno G.D.	536	Zelinskiy A.V.	57, 125
Yukhymchuk V.O.	170, 178, 465, 476	Zhang J.	582
Yurchenko Yu.V.	236, 597	Zhang Y.	566
Yurchyshyn O.	332	Zhdaniuk N.V.	50
Yushchenko A.	535	Zheltonozhskaya T.B.	274

Z

Zabashta Y.F.	300	Zhuravsky S.V.	29
Zabashta Yu.F.	349	Zhydachevskyy Ya.	186
Zabolotnyy I.M.	350	Zhydenko I.	197, 203
Zaderko A.	115	Zhytnyk D.O.	514, 515
Zagorodnii V.V.	156	Zhytskyi A. K.	83
Zagorodniy Yu. O.	168	Zielińska-Jurek A.	221
Zahornyi M.M.	14	Zikrata O.V.	166
Zahorodnia S.	120, 580, 598	Zinoviev P.V.	7, 466
Zahorodniy Y.O.	153	Zobnina V.G.	229
Zaiats D.O.	54, 156	Zolotarenko A.D.	116
Zaiats L.	61	Zolotarenko O.D.	116
Zaichenko A.	308	Zolotovskiy A.	182
Zaika S.O.	426	Zoryansky V. N.	7, 466
Zaika V.V.	565	Zosimov R.I.	467
Zaika Ya.A.	470	Zou X.D.	519
Zaitsev V.	18, 70	Zozulia V.O.	570
Zajac M.	375	Zozulya G.I.	141
Zakharov A.V.	139	Zraichenko O.V.	400
Zakiev V.I.	548	Zueva N.O.	523
Zamorskyi V.O.	301	Zviagintseva G.	7

The **Enterprise Europe Network** is a service that provides support for Small and Medium-sized Enterprises (SMEs) with international ambitions. Co-funded by the European Union's COSME and Horizon 2020 programmes, the Network's aim is to help businesses innovate and grow internationally.

The Enterprise Europe Network was launched on 7 February 2008 by former EU Commissioner Günter Verheugen. The Enterprise Europe Network combines the previous Euro Info Centres and the Innovation Relay Centres. From 2008 to 2014, the Network was co-financed by the EU's Competitiveness and Innovation Framework Programme (CIP), in cooperation with institutions at national and regional levels. From 2015-2020, the Network is co-financed under the European Union's programme for the competitiveness of SMEs (COSME) and Horizon 2020.

Under the responsibility of the European Commission's Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, the Enterprise Europe Network is managed by the Executive Agency for Small and Medium-sized Enterprises (EASME).

The Network is active in more than 60 countries worldwide. It brings together 3,000 experts from more than 600 member organisations, including:

- chambers of commerce and industry
- technology poles
- innovation support organisations
- universities and research institutes
- regional development organisations

Enterprise Europe Network advisory services support businesses seeking to expand into international markets. The services cover a wide range of regulatory areas and market intelligence:

- Compliance with EU regulations and standards (e.g. CE marking)
- Access to international markets – market intelligence and capacity building
- International public contracts – access to cross-border procurement and EU tender opportunities
- National and regional finance and funding – identification of sources of finance and investor-readiness training
- EU funding schemes and application support
- Intellectual property rights (IPR) – patents and IPR applications and exploitation strategies
- Energy and resource efficiency – identification of technologies and finance opportunities
- Management improvement – capacity building

Enterprise Europe Network innovation support services are available based on an assessment of the needs and development phase of the business.

At an entry level, Network services include:

- information on innovation-related policies, legislation and support programmes
- links with local innovation stakeholders
- information about access to local sources of funding/support

Network experts can provide one-to-one services to support innovation capacity building. Services include innovation audits, advice on intellectual property, marketing and access to finance.

Finally, the Network provides key account management services to businesses benefitting from the Horizon 2020 SME instrument programme, part of the European Innovation Council (EIC) pilot.

In 2017, Ukraine joined the European Enterprise Entrepreneurship Network (EEN) within the framework of the COSME program, which promotes the competitiveness and innovative development of small and medium-sized enterprises, innovation organizations and institutes / universities. For this purpose in Ukraine was created a Consortium EEN-Ukraine, which included representatives of business and government agencies, as well as scientific organizations.

To contact EEN-Ukraine please follow the website

<http://eenukraine.com>

or page on Facebook

<https://www.facebook.com/EnterpriseEuropeNetworkEU>.

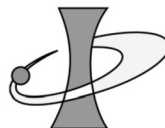
E-mail: een.network.ukraine@gmail.com



Co-organizers of conference:

Institute of Physics of the NAS of Ukraine,
Ukraine;

University of Turin, Italy;
Pierre and Marie Curie University
and CNRS, France;
University of Tartu, Estonia;
Representative office of Polish
Academy of Sciences in Kiev;
Chernivtsi National University,
EEN-Ukraine Consortium.



YURIY FEDKOVYCH
CHERNIVTSI
NATIONAL
UNIVERSITY



EEN-Ukraine
consortium



Partners of Conference

Springer

Taylor & Francis Group, LLC

Organizing Committee Members of conference:

Chairman: NASU academician L.P Yatsenko;
NASU corresponding member A.V. Ragulia, Problems of Material Sciences Institute,
NAS of Ukraine;
NASU corresponding member V.N. Uvarov, Metallophysics Institute, NAS of Ukraine;
NASU corresponding member A.M. Negriyko, Institute of Physics, NAS of Ukraine;
Petro Fochuk Yuriy Fedkovych Chernivtsi National University, Ukraine;
Yuriy Khalavka Yuriy Fedkovych Chernivtsi National University, Ukraine;
Victor Martynyuk, Taras Shevchenko national University of Kyiv;
Oleksandr Bediukh, Taras Shevchenko national University of Kyiv.

International Committee:

Prof. Henryk Sobczuk, Representative office „Polish Academy of Sciences” in Kyiv;
Dr. A. Damin, University of Turin, Italy;
Prof. Dr. habil. Emmanuelle Lacaze, Pierre and Marie Curie University and CNRS,
France;

Prof. Bouchta Sahraoui, University of Angers, UFR Sciences, Institute of Sciences and Molecular Technologies of Angers, France;

Prof. Bakolas Dimitris, European Profiles A.E., Greece;

Dr. L.A. Dolgov, University of Tartu, Estonia;

Prof. Mohamed Bououdina, University of Bahrain, Kingdom of Bahrain;

Prof. Dr. Annemarie Pucci, Kirchhoff Institute of Physics of the Ruprecht-Karls University of Heidelberg, Germany.

Chairman of Local Committee and Secretary of Conference:

Dr. O. M. Fesenko, Institute of Physics of NAS of Ukraine.

Local Committee:

Dr. O. Budnyk, Dr. Y. Kifiuk, PhD A. Yaremkevich, Mr. V. Tkachenko, Dr. V. Hryn, PhD. P. Golub, PhD. M. Rallev, Mr. S. Starinets. Mr. V. Kovadlo, Dr. E. Leonenko.

Наукове видання

**The International research and practice conference
“Nanotechnology and nanomaterials”
(NANO-2026)**

**Book of abstracts is published in authors' edition without
modifying by the Organizing Committee**

Head of Organizing Committee:

*Dr. Olena Fesenko, Institute of Physics of the NAS of Ukraine
Design and layout: Volodymyr Havlo*

Technical support of the International conference (NANO-2026): PhD A. D. Yaremkevych (media assistance), Junior Researchers of the Institute of Physics of the NAS of Ukraine, M. V. Rallev (information and transportation support), E. V. Leonenko (technical support), Y. S. Kifiuk (sound equipment and photo report), O. P. Budnyk (registration of participants and general questions), V.O. Hryn (general questions) and P.V. Golub (technical support), Leading Engineers of the Institute of Physics of the NAS of Ukraine: S. Starinets (registration support), V. Kovadlo (general questions) and V. S. Tkachenko (poster session support).

Підписано до друку 01.08.2026. Формат 60х90/16.
Папір офсетний. Друк офсетний. Умовн. друк. арк. 41,37. Зам. № 1.

ТзОВ "Галицька видавнича спілка"
вул. Тугана-Барановського, 24, м. Львів, 79005,
тел.: (032) 276-37-99
Свідоцтво суб'єкта видавничої справи ДК № 7408 від 27.07.2021 р.

Друк:

ТзОВ "РВФ "Поліграф-сервіс"
вул. Грабовського 11/13, м. Львів, 79008
тел.: (067) 673-85-75
Свідоцтво про внесення суб'єкта видавничої справи до державного
реєстру видавців, виготовників і розповсюджувачів видавничої
продукції серія ДК № 3900 від 14.10.2010